

**DEPARTMENT OF HOMELAND SECURITY
U.S. CUSTOMS AND BORDER PROTECTION**

INTERAGENCY AGREEMENT

PART I

U.S. Customs and Border Protection	Agreement No.	HSBP1010X00180	Modification No.	
	Option No.		Task Order No.	
Statutory Authority ECONOMY ACT (31 U.S.C 1535)		Requisition No. 0020057641	Date Prepared 08/16/2010	
Name and Address of Customs Organization (Office or Division Responsible for Agreement) DHS - Customs & Border Protection CBP 1901 South Bell Street Arlington VA 22202		Performance Location Office of the Asst Secretary, Law Enforcement & Emergency Ops 1849 C. St. NW WASHINGTON DC 20240		
Participating Agency	Agreement No.	RA10W0648	Modification No.	
	Option No.		Task Order No.	
Statutory Authority		Requisition No.	Date Prepared	
Name and Address of Participating Organization (Office or Division Responsible for Agreement) Department of the Interior Office of the Secretary Ofc of Law Enforcement & Security 1849 C St. NW, MS-3409 Washington DC 20248-0001		Performance Location DEPARTMENT OF THE INTERIOR OFFICE OF THE SECRETARY OFFICE OF LAW ENFORCEMENT AND SECURITY 1849 C ST. NW, MS-3409, WASHINGTON DC 20248		

PART II

All acquisitions made under this Agreement shall comply with the Competition in Contracting Act. P.L. 98-369, and regulations pertaining thereto.				
Scope of Work: See Atch SOW	Period of Performance: From 08/25/2010 To 09/30/2015			
	Base Price of Funded IA:	\$6,812,803.00		
	Amount of this Modification:	\$0.00		
	Overhead:	\$0.00		
	Total Price of IA:	\$6,812,803.00		
Attachments:	<input checked="" type="checkbox"/> Terms and Conditions of Agreement	<input checked="" type="checkbox"/> Statement of Work	<input type="checkbox"/> Quantity and Unit Price	
	<input type="checkbox"/> Determinations and Findings	<input type="checkbox"/> Option Period Dates	<input type="checkbox"/> Form 236A	
	<input type="checkbox"/> Market Research Findings	<input type="checkbox"/> Other: _____		

U.S. Customs and Border Protection Form 236 (05/02)

PART III

Special Instruction: U.S. Customs and Border Protection Interagency Agreement Number and Project Code must be referenced on every invoice/voucher.

PARTICIPATING AGENCY FUNDING	Include in accounting strip: PROJECT CODE/NO. - APC - BFY - FUND - BUDPLN - ORG - PROG - OCC - TOTAL
	<p>6051WTW03 52</p> <p>Approp # 14 X 4523</p> <p style="text-align: right;">GRAND TOTAL \$6,812,803.00</p>
U. S. CUSTOMS AND BORDER PROTECTION FUNDING	Include in accounting strip: PROJECT CODE/NO. - APC - BFY - FUND - BUDPLN - ORG - PROG - OCC - TOTAL
	<p>10 6100.2532USCSGLCS0928040500Z00009173SB01 SB1402532</p> <p style="text-align: right;">GRAND TOTAL \$6,812,803.00</p>

PART IV

Check Appropriate Boxes:		<input type="checkbox"/> Transfer Appropriation	<input type="checkbox"/> Billing for actual cost incurred
		<input type="checkbox"/> Other	
<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Quarterly	<input type="checkbox"/> Semi-Annual	<input type="checkbox"/> Annual
		<input type="checkbox"/> Advanced	<input type="checkbox"/> Reimbursable Direct Fund Cite
BILLING / PAYMENT	PARTICIPATING AGENCY		U.S. CUSTOMS AND BORDER PROTECTION
	Agency Locator Code: 14010001		Agency Locator Code: 70050800
	BPN No.: 130907426		BPN No.: DUNS# 879824324
	Address: National Business Center, MS-D2705 Financial Mgt - Bus Mgmt Officer Attn: Agreements 7301 W. Mansfield Ave Denver CO 80235-2230		Address: DHS - Customs & Border Protection National Finance Center PO Box 68908 Indianapolis IN 46268
	Point of Contact: MISTY FOSTER		Point of Contact: (b) (6)
	Telephone No.: 303-969-7454		Telephone No.: (b) (6)
	FAX No.:		FAX No.: (b) (6)
	E-Mail Address: MISTY_FOSTER@NBC.GOV		E-Mail Address:

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APPROVALS

	PARTICIPATING AGENCY	U.S. CUSTOMS AND BORDER PROTECTION	
PROGRAM OFFICE	Name: JONATHAN M. ANDREW	Name:	
	Title: INTERAGENCY BORDERLAND COORDINATOR	Title:	
	Telephone No.: 202-208-7431	Telephone No.:	
	FAX No.:	FAX No.:	
	E-Mail Address: JONATHAN_ANDREW@IOS.DOI.GOV	E-Mail Address:	
	Signature: <i>[Signature]</i> Date: 9-23-10	Signature:	Date:
COTR	Name:	Name:	
	Title:	Title:	
	Telephone No.:	Telephone No.:	
	FAX No.:	FAX No.:	
	E-Mail Address:	E-Mail Address:	
	Signature: Date:	Signature:	Date:
PROGRAM BUDGET OFFICE(R)	Name: KATHERINE MCCULLOCH	Name:	
	Title: BUDGET OFFICER, OFC OF THE SEC	Title:	
	Telephone No.: 202-208-6443	Telephone No.:	
	FAX No.: 202-208-3911	FAX No.:	
	E-Mail Address: KATHERINE.MCCULLOCH@IOS.DOI.GOV	E-Mail Address:	
	Signature: <i>[Signature]</i> Date: 9/23/10	Signature:	Date:
BUDGET DIVISION (for 2X only)	Name:	Name:	
	Title:	Title:	
	Telephone No.:	Telephone No.:	
	FAX No.:	FAX No.:	
	E-Mail Address:	E-Mail Address:	
	Signature: Date:	Signature:	Date:
CON- TRACTING OFFICER	Name:	Name: KERRI A. BISHOP	
	Title:	Title: Contracting Officer	
	Telephone No.:	Telephone No.: (b) (6)	
	FAX No.:	FAX No.:	
	E-Mail Address:	E-Mail Address: (b) (6)	
	Signature: Date:	(b) (6)	Date: 9/28/10

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Statement of Work

Interagency Agreement Between U.S. Customs and Border Protection and the Department of the Interior Addressing Potential Impacts to Natural and Cultural Resources from PF70, PF225 and VF 300

I. BACKGROUND

This Statement of Work (SOW) sets out the terms and conditions that are applicable to the projects, referred to herein as "Conservation Actions." The projects will be implemented pursuant to the Interagency Agreement between U.S. Customs and Border Protection (CBP) and the Department of Interior (DOI) (collectively the "Parties"), Agreement No. HSBP1010X00180 (the "Agreement"). The Conservation Actions that are to be funded and implemented pursuant to this Agreement address effects on DOI-administered resources and are part of a larger effort by CBP and DOI to mitigate for environmental effects that have resulted from CBP's PF 225, VF 300, and PF 70 initiatives, which was memorialized in a January 15, 2009 Memorandum of Agreement and a Letter of Commitment between DOI and CBP. In accordance with applicable statutes, DOI responsibility for these resources applies irrespective of the ownership or jurisdictional status of lands and waters. For purposes of this Agreement, DOI-administered resources are defined as:

- Endangered and threatened species whose designated habitats, distribution or population will be adversely affected by the deployment and maintenance of border security infrastructure.
- Other fish and wildlife including: migratory birds, resident species, and other members of the animal kingdom whose populations or habitats will be adversely affected by the deployment and maintenance of border security infrastructure.
- Plant communities including wetlands and riparian areas that will be adversely affected by the deployment and maintenance of border security infrastructure.
- Adverse effects to other natural resources such as soils, hydrology, designated wilderness areas from the deployment and maintenance of border security infrastructure.
- Cultural resources, including Native American human remains and cultural items that will be adversely affected by the deployment and maintenance of border security infrastructure.

II. GENERAL TERMS AND CONDITIONS APPLICABLE TO ALL CONSERVATION ACTIONS

Each and every Conservation Action carried out pursuant to this Agreement is subject to the following general terms and conditions:

A. Total Available Funding: Pursuant to this Agreement, CBP will make up to \$6,812,803.00 available to DOI for the activities and projects designed to address impacts to DOI-administered resources. The funds provided by CBP shall be used to implement Conservation Actions that will address effects on DOI-administered resources within the States of California, Arizona, New Mexico, and Texas. No funds provided under this Agreement or any other interagency agreement between the Parties may be used to fund conservation actions outside the United States without express, written authorization from CBP.

B. Immediate Funding for Nine Non-Land Acquisition Conservation Actions: Pursuant to a Memorandum of Agreement and a Letter of Commitment between DOI and CBP which were executed on January 15, 2009, DOI has submitted to CBP a list of 29 conservation actions for consideration. Based on a review of these projects, CBP has agreed to immediately provide funding for nine (9) high priority conservation actions which do not involve land acquisition. The nine (9) projects will be immediately funded pursuant to this Interagency Agreement. Other Conservation Actions will be activated, and the Agreement will be modified or amended to include such actions, as the Parties agree on the scopes of work to be accomplished and as funding becomes available.

Each Conservation Action to be carried out under the Interagency Agreement will be described in separate Project Description Worksheets. Each Project Description Worksheet will include a detailed description of the work to be undertaken and an individualized cost estimate of the Conservation Action. Once the work to be undertaken in a Project Description Worksheet has been agreed to by the Parties, it shall be added to Appendix 1 of this SOW and expressly incorporated herein.

The Conservation Actions will be executed through a combination of in-house DOI personnel and external contracts. Approximately 40% of the work under this Agreement will be executed by in-house DOI personnel and 60% will be executed under contracts.

C. Tasks: Each Conservation Action, as described in a Project Description Worksheet, that is set forth in Appendix 1 of this SOW shall be treated as a separate task. Conservation Actions shall be subject to the General Terms and Conditions set forth herein and be carried out in accordance with the individual Project Description Worksheet in Appendix 1 of this Agreement.

D. Adjustments in Funding Individual Conservation Actions: Adjustments to the amount of funding that has or will be made available for any individual Conservation Action shall be made in accordance with the following procedures:

1. Costs Exceed: To the extent that cost of completing any Conservation Action exceeds its individualized cost estimate set forth in Appendix 1:

- (a) DOI shall, as soon as practicable, notify CBP of the funding shortfall.
- (b) After receiving such notice from DOI, CBP will consult with DOI, and the Parties will make a mutual determination as to whether: (1) the project or action at issue should be discontinued; or (2) the project or action at issue should be completed with funds that were previously set aside for another on-going or future Conservation Action.
- (c) If the Parties determine that the project or action at issue should be completed using funds that were previously set aside for another on-going or future Conservation Action, the Parties will consult to determine: (1) the estimated cost of completing the project or action; and (2) the on-going or future Conservation Action from which the costs necessary for completion should be drawn. The Parties shall also work together to make any necessary adjustments to or modifications of the Project Description Worksheets of the relevant Conservation Actions.

2. Remaining Balance: To the extent that the cost of any individual Conservation Action is less than its individualized cost estimate set forth in Appendix 1:

- (a) DOI shall, as soon as practicable, notify CBP of the excess funding.
- (b) After receiving such notice from DOI, CBP will consult with DOI, and the Parties will make a mutual determination as to whether to use the excess funding to supplement the funds available for another on-going or future Conservation Action. The Parties shall also work together to make any necessary adjustments or modifications to the Project Description Worksheets of the relevant Conservation Actions.

E. Abandonment and/or Replacement of Conservation Actions: If at any point during the execution or implementation of any of the Conservation Actions set forth in Appendix 1, the Parties mutually agree that it is no longer feasible and/or possible to complete said Conservation Action, the Parties will consult and make a mutual determination as to whether: (1) the project or action at issue should be replaced with a new Conservation Action that is designed to address the same or similar DOI-resource; (2) or whether any unused balance should instead be

applied to an on-going or future Conservation Action that has already been approved for funding under this Agreement. Any funds used toward a Conservation Action that is later abandoned or replaced shall continue to count towards the \$6,812,803.00 in total available funding for this Interagency Agreement.

F. Exhaustion of Total Available Funding: Upon the exhaustion or use of the entire \$6,812,803.00 that is being made available pursuant to this Interagency Agreement, the Conservation Actions to be carried out under this Interagency Agreement shall be deemed complete. Provided, however, that any Conservation Action that is to receive phased funding which is not a part of and/or in addition to the \$6,812,803.00 provided for in this Interagency Agreement shall not be deemed complete until all allotted funds have been expended.

G. Land Acquisition: Any Conservation Action that involves CBP's providing funds for the purchase of an interest in land (including conservation easements and fee simple interests) by a third party shall be subject to the following terms and conditions:

1. DOI and CBP will ensure that the interest to be acquired conserves the land in perpetuity.
2. Notwithstanding any provision of the Agreement and/or the provisions of any individual Conservation Action to the contrary, prior to the purchase of any interest in land being agreed to and finalized with a willing seller, CBP and DOI will consult and mutually agree that proceeding with the transaction will allow for both agencies to achieve their mandated missions, including border security operational requirements and conservation goals. CBP and DOI agree that when DOI identifies a tract and a willing seller for a proposed mitigation action, this consultation shall occur and be finalized within 60 days of being initiated.
3. Interests in land that are funded pursuant to this Agreement may only be acquired from willing sellers that can prove a title interest sufficient to convey the property.
4. If at any point after the purchase of an interest in land under this Agreement CBP determines that manner in which such land is being administered or managed is negatively impacting its border security operations, CBP may request a consultation with DOI to discuss changes in the management and administration of such land. With respect to the management and administration of any land purchased under this Interagency Agreement, the Parties shall use their best efforts to

accommodate their respective conservation and operational needs and objectives.

H. Estimated Cost Breakout of Conservation Actions to be Immediately Funded

First year agreement is in effect.

a. Mitigation Coordinator	\$685,500
b. Sasabe Biological Opinion	\$2,119,000
c. Organ Pipe Cactus NM Biological Opinion	\$980,000
d. San Bernardino Valley Mitigation	\$657,480
e. Rio Yaqui Fish Studies	\$441,250
f. Peninsular Bighorn Sheep Study	\$230,000
g. Coronado NM Agave Restoration	\$274,873
h. Northern Aplomado Falcon Reintroduction and Habitat Restoration	\$499,700
i. Border-wide Bat Conservation	\$925,000
Total	\$6,812,803

III. DELIVERABLES

Six (6) months after funding is made available to DOI for Conservation Actions in the first year of this Agreement, and in each subsequent year for the life of this agreement, DOI shall furnish CBP with a detailed mid year report on the status of each Conservation Action approved for funding. The report will include a detailed description of the accomplishments of each Conservation Action over the duration of the reporting period as well as a detailed financial accounting of the expenditures against each of the approved projects. In addition, the report shall outline the projected accomplishments for each Conservation Action over the next 6 months.

On the one year anniversary after which funds are made available pursuant to this Agreement, and on each subsequent annual anniversary, excepting every third year, DOI shall prepare and distribute a public document which outlines the accomplishments pursuant to this Agreement. This document will be provided for CBP review, and CBP comments shall be incorporated prior to public release of the document. DOI will collaborate with CBP in the development of the distribution list.

By the end of the third year after funds are made available under this Agreement, DOI shall furnish CBP with a detailed report which, (1) outlines the accomplishments for that year, (2) analyzes the success and overall progress of each habitat restoration project undertaken pursuant

to this Agreement for the preceding three year period and (3) discusses and quantifies the extent to which the mitigation implemented by DOI on behalf of CBP has served to off-set impacts related to the border security projects subject to the April 1, 2008 waiver.

IV. PERIOD OF PERFORMANCE

The estimated periods of performance for each Conservation Action are specifically set forth in the Project Description Worksheets attached hereto in Appendix 1. Beginning in September of 2011, and on an annual basis thereafter, CBP and DOI will review the progress and status of each Conservation Action that is currently being funded and implemented under the Agreement.

The parties will assess, among other things, current project workloads, work that has been completed, and work that is still required to be completed. Based on this mutual assessment of the Conservation Actions currently being funded and implemented, CBP and DOI will make a mutual decision as to whether the Agreement should be modified, terminated, canceled or extended into the following fiscal year.

V. FUNDING

Fund: 09173
Org Code: 28040500
Program Code: SB01
Project Code: 000

VI. REPORTING

DOI will keep full and complete records and accounts with respect to the use of funds provided under this Agreement in accordance with generally accepted accounting principles. DOI shall maintain relevant documentation to reflect expenditures, procurement costs, and other related costs. DOI will provide monthly billing to DHS/CBP for expenses incurred relevant to this interagency agreement in a format that clearly identifies the expenses against the requirements. A template of the invoice format has been attached to this Agreement.

VII. POINTS OF CONTACT

REQUESTING AGENCY (BUYER)

Contracting Officer Tech. Representative:

Name: (b) (6)

Title:

Address:

24000 Avila Rd
Laguna Niguel, CA 92677

Phone: (b) (6)

SERVICING AGENCY (SELLER)

Technical Contact:

Name: Jonathan M. Andrew

Title: DOI Interagency Borderland
Coordinator

Address: Office of the Secretary,
Law Enforcement Security and
Emergency Management
1849 C St, NW
Washington, DC 20240

Phone: (202) 208-7431

Fax:

Email: (b) (6)

REQUESTING AGENCY (BUYER)

Contracting Contact:

Name: (b) (6)

Title: Contract Specialist

Address: 1901 S Bell St. (b) (6)

Arlington, VA 22202

Phone: (b) (6)

Fax:

Email: (b) (6)

Fax:

Email: jonathan_andrew@ios.doi.gov

SERVICING AGENCY (SELLER)

Agreements Contact:

Name: Katherine McCulloch

Title: Budget Officer
Office of the Secretary

Address: 1849 C. St NW

Washington, DC 20240

Phone: (202) 208-6443

Fax: (202) 208-3911

Email: Katherine_McCulloch@ios.doi.gov

APPENDIX ONE

**Department of the Interior
PF-225 and VF-300 Mitigation Measure
Project Description Worksheet**

General Information

Project Title: Mitigation Coordinator

Project Manager: Elizabeth Oms, Acting ARD for Ecological Services, 505-248-6646, elizabeth_oms@fws.gov

Sponsoring Bureau: U.S. Fish and Wildlife Service

Project Location: Region 2 Regional Office, Albuquerque, NM

Congressional District: U. S. Representative Martin Heinrich, District 1

Total Estimated Cost: 685,500.00

Description

Project description: The incumbent will serve as a Regional staff coordinator for tracking and reporting project status, including 6 month, annual and tri-annual progress reporting, contract management, coordinating and completing various associated procedural requirements such as realty acquisition and contaminant reviews for projects that mitigate impacts to threatened and endangered species and other trust responsibilities as a result of Customs and Border Protection (CBP) activities. The incumbent will be in a regional coordination position to be shared by Regions 2 and 8, located in the Region 2 Regional Office. The coordinator will ensure that mitigation projects, where avoidance and/or minimization through Best Management Practices was or is not possible, are designed to offset the impacts of border security activities on natural and cultural resources that are managed, protected, or under the jurisdiction of Department of the Interior (DOI). The incumbent will be responsible for coordinating the prioritized mitigation needs with associated DOI bureaus.

Estimated Start Date: Will be advertised within the next month

Projected Finish Date: 4 years

Corresponding Unique ID Numbers

N/A

Project Itemized Budget

Salary and Benefits, GS-13 125,000/yr. x 4years = 500,000

Travel, 12,500/yr x 4 years = 50,000

Office Equipment (laptop docking station, furniture, etc.) = 4,000

Cell phone = 375/yr x 4 years = 1,500

Vehicle = 30,000

Permanent Change of Station = \$125,000

Contributing Partners

Fully funded by DHS from the \$50 million dollars for mitigation for 4 years.

Comments

Monitors the status of project planning (e.g., NEPA compliance, section 7 consultations, cultural resource clearances, realty transaction processes).

Facilitates the development of a process, together with the responsible parties, for meeting time lines throughout planning, implementation and completion of mitigation projects.

Monitors the status of project implementation; anticipates problems and works to correct them.

Prepares 6 month, annual and tri-annual progress reports on the status of mitigation projects.

Assists Region 2 and Region 8 Ecological Services Field Offices, and other DOI field units with the development of contracts and agreements. Ensures documentation is in compliance with various procurement practices and amends agreements/contracts as needed. Tracks contracts/grants/agreements through the Regional process and through the recipient process (e.g., DOI, State agencies, etc).

Maintains a high level of cooperation and coordination amongst Region 2 and Region 8 Ecological Services Field Offices; the Washington DC, Fish and Wildlife Service Office; the Department of the Interior's (DOI) Interagency Borderlands Coordinator; DOI Sector Leaders, other DOI bureaus; and other Regional Office Divisions with implementation responsibilities. Coordinates with the appropriate Department of Homeland Security (DHS) and Border Patrol Offices and SBI environmental division in DC, as appropriate. Ensures coordination with State agencies, relevant Tribes, and Federal land-management agencies.

Coordinates the Regional processes for prioritization of mitigation projects and all aspects of mitigation implementation for projects included in the Memorandum of Agreement and Letter of Commitment with Customs and Border Protection Measures (DOI-CBP MOA/LOC) - Mitigation.

Assists the field offices in the development of conservation guidance for CBP and works cooperatively with CBP to implement conservation principles for listed species and other natural and cultural resources. Ensures the consistency of a conservation approach across the Southwest border.

Participates in site visits and develops site specific recommendations for mitigation and conservation.

Performs other duties as assigned.

**Department of the Interior
PF-225 and VF-300 Mitigation Measure
Project Description Worksheet**

General Information

Project Title: Implement jaguar, bat, and soil stabilization conservation measures in the Naco-Douglas-Sasabe Biological Opinion 22410-2007-F-0416.

Project Manager: Susan Sferra, , 602-242-0524 ext 208, susan_sferra@fws.gov

Sponsoring Bureau: U.S. Fish and Wildlife Service, Arizona Ecological Services Office, Phoenix

Project Location: Pima, Santa Cruz, and Cochise Counties, Arizona.

Congressional District: District 7, Raul Grijalva
District 8, Gabrielle Giffords

Total Estimated Cost: \$2,119,000

- A. DOI may initiate implementation of all conservation actions specified under this Project Description Worksheet, except** no funds provided under this Agreement or any other interagency agreement between the Parties may be used to fund conservation actions outside the United States without express, written authorization from CBP.

Description

Project description: The purpose of the work described below is to implement conservation measures, as formally agreed upon between Customs and Border Protection (CBP) and the U.S. Fish and Wildlife Service in the Naco-Douglas-Sasabe Biological Opinion 22410-2007-F-0416, August 2007, for PF-70 in fence segments D-4, D5A, E2B, E3, and F1, Arizona. The purpose of these agreed-upon conservation measures is to offset adverse effects to the jaguar and lesser long-nosed bat, and stabilize soil, as follows: 1) survey, monitor, conserve, and recover jaguars and their habitat, 2) replace lost agaves at 2:1 ratio to compensate for mortality rate of transplanted agaves, and 3) stabilize and revegetate disturbed soils by planting and/or hydroseeding/mulching.

1. Survey, monitoring, conservation, and recovery of jaguars and their habitat.

Excerpt from the Biological Opinion: *"CBP will support USFWS in jaguar survey and monitoring efforts and conservation and recovery measures. Survey and monitoring methods and conservation and recovery measures will be developed through coordination with USFWS, Arizona Game and Fish Department, and the Tohono O'odham Nation within four months following the release of the Biological Opinion. Details and schedules regarding those methods and measures will be identified by the end of the four months. Monitoring of jaguars may include a combination of satellite telemetry and camera survey techniques. Multiple techniques may be used to monitor jaguar habitat; however, one component of monitoring would likely include an*

assessment of indirect effects to jaguar movements and habitat from border traffic in areas where no fence is installed."

Survey and monitoring, management of jaguar habitat, outreach/education, landowner incentives, and conservation plan development within the northern jaguar range. (\$2,035,000). We will coordinate the implementation of this project with our partners and share study results with them. Where appropriate, reports and papers resulting from these projects will be peer reviewed. All projects need to be evaluated every year for compliance and direction and, if needed, changes will be made. A comprehensive review of the projects and program will be conducted periodically in accordance with the Interagency Agreement, e.g. mid-year, annual and tri-annual reports.

The objectives and budgets for jaguar conservation are provided in the table below. Projects will be conducted by third parties. Each project request for proposals will instruct applicants to propose the amount of work they can conduct with the budget provided.

The draft jaguar Survey and Monitoring budget provided in the table below is what it would cost if the government conducted the work. However, when competed, we expect a third party to be able to conduct the work for as many as five years of monitoring. Third party organizations may already possess the necessary equipment and employ less expensive personnel.

2. Lesser long-nosed Bat Foraging Plant Replacement

Excerpt from the Biological Opinion: *"CBP/OBP will attempt to avoid disturbance to agave and other plant species that are used by lesser long-nosed bats for forage, to the extent practicable. Such specimens will be avoided, salvaged, or replaced at a ratio of 2:1 from local nursery stock."*

Prepare bat foraging plant replacement plan. Replace lost agaves at 2:1 ratio to compensate for mortality rate of transplanted agaves. Grow, plant, monitor, and water agaves using local stock. Determine survival rate after five years (\$75,000).

3. Stabilization and Revegetation of Disturbed Soils

Excerpt from the Biological Opinion: *"Any temporarily disturbed soils would be stabilized and revegetated with native species, including cottonwood and willow saplings at washes and arroyos, to provide erosion and sedimentation control. Disturbed areas would also be sprayed with a hydroseed mixture to establish an herbaceous cover more rapidly."*

Prepare restoration plan, prepare site, and hydroseed 10 acres of disturbed areas. The budget FWS originally proposed, \$9,000, is insufficient to complete the work. See Project Itemized Budget and comments below.

Estimated Start Date: 2010. Dependent on the following steps: 1) transfer of funds to USFWS, 2) completion of requests for proposals for contract work or sole source contract scopes of work, 3) date contracts are awarded or interagency agreements are completed. This process may take one year from the date funds are received by USFWS for preparation, review, and award of all contracts or agreements.

Projected Finish Date: Up to four years from start date of project. This will allow up to one year to get the jaguar project up and running, three years for camera monitoring, and up to one year to analyze data and write reports.

Corresponding Unique ID Numbers

AZ001

Project Itemized Budget

1. Survey, monitoring, conservation, and recovery of jaguars and their habitat

CATEGORY	DESCRIPTION	COST ESTIMATE
a. Jaguar Surveys and Monitoring		
	Provide funds to a third party to survey and monitor jaguars for 4 years primarily using remote cameras within the northern jaguar range. Other techniques such as scat and track transects may be used in conjunction with remote camera monitoring. Surveys will be conducted: 1) at the U.S./Mexico international border where jaguars are most likely to cross; 2) along potential, historic, and known jaguar travel corridors within the northern jaguar range; and 3) other areas as appropriate.	
Capital (one-time purchase)	100 digital camera traps (brands vary greatly in cost and quality), compact flash cards, cable and lock set for cameras, signs for cameras, misc. hardware for cameras, 1 cordless drill, 3 GPS units, topo maps, 2 laptop computers, software, printer, 1 used truck, satellite phone, radios camping gear	\$122,000
Personnel (annual)	Full time project coordinator, 1 field assistant GS 11-5 @ \$63,930 + GS-9-5 @ \$52,841 = \$116,771 0.33% benefits = \$38,534	\$189,472
Per diem (annual)		\$12,200
Transportation expenses (annual)	Insurance and mileage for 1 truck	\$12,200
Miscellaneous (annual)	Batteries, shipping & postage, camera repairs, office supplies, field supplies, lab costs for	\$11,590

CATEGORY	DESCRIPTION	COST ESTIMATE
	DNA analysis, postage/transport for scat, phone	
TOTAL FOR YEAR 1		\$335,872
Annual rate Years 2 and 3		\$225,462
GRAND TOTAL FOR 3 YEARS (MINIMUM FOR STUDY)		\$800,000

b. Jaguar Conservation		
1. Land stewardship endowment to protect habitat, jaguars, and prey	Tasks include development and implementation of management plans. On-the-ground activities may include fencing to protect resources, habitat restoration, and routine patrolling.	\$500,000
2. Outreach/education	<p>Provide funds to a third party to work with ranchers, government, and communities to:</p> <p>collect information on jaguar sightings;</p> <p>develop infrastructure for reporting jaguars, which may lead to increased conservation of jaguar and prey;</p> <p>develop jaguar conservation training and capacity building where -jaguar knowledge is lacking;</p> <p>conduct school programs focused on the importance of jaguar conservation for children;</p> <p>develop radio programs on jaguar conservation;</p> <p>develop slideshows and education programs on the importance of jaguar conservation.</p> <p>\$50,000 x 4 years</p>	\$200,000

3. Landowner assistance and incentives	Provide funds to a third party for assistance and incentives to landowners who agree to protect jaguars on lands occupied by jaguars, including providing technical assistance, on-the-ground habitat improvements (i.e., isolating a water source for livestock, fencing, gating, etc.), and other incentives as appropriate. Funding will support full-time personnel to construct water sources for livestock, fencing, gating, etc.	
Salary	2 specialists x 4 yrs \$16,250/yr x 2 x 4 yrs = \$130,000	\$130,000
Per diem	2 specialists x 4 yrs \$6,250/yr x 2 specialists x 4 yrs = \$50,000	\$50,000
Vehicle	Purchase used vehicle or contribute toward use of vehicle	\$15,000
	Gas and maintenance for 5 yrs \$10,000 x 4 yrs	\$40,000
Supplies	\$12,500 x 4 yrs	\$50,000
TOTAL		\$285,000
4. Conservation Planning	Provide funds to a third party for northern jaguar conservation planning efforts to identify a) suitable habitat, corridors, and population goals for jaguars in the northern portion of their range; b) habitat protection and improvement needs, c) management planning needed to ensure the survival and recovery of the northern jaguar. This effort may build on 1.a and 1.b.1 - 1.b.3 above. These products will be used in development of the jaguar recovery plan.	\$250,000
TOTAL		\$1,235,000
GRAND TOTAL		\$2,035,000

2. Lesser long-nosed Bat Foraging Plant Replacement

CATEGORY	DESCRIPTION	COST ESTIMATE
<u>2. Lesser long-nosed Bat Foraging Plant Replacement</u>	<p>Prepare bat foraging plant replacement plan. Replace lost agaves at 2:1 ratio in the 215 acre area of disturbance to compensate for mortality rate of transplanted agaves. Plant, monitor, and water agaves using local stock.</p> <p>The total cost will depend on the number of agaves that need to be replaced. We will need the estimate of the number of agaves removed and transplanted. If no estimate is available, we propose planting 50 agaves per acre on 5 acres. This cost estimate includes no allowance for replanting if agaves die after 2 years.</p> <p>Prepare plant replacement plan and prepare for planting = \$7,700</p> <p>Planting \$10/plant = plant and planting cost \$10/plant x 50 plants/ac x 5 ac = \$2,500</p> <p>Watering \$900/day for 2-person water truck (one driver and one person to hand water plants) Water every two weeks in yr 1, except for 3 months during monsoon season: \$900/day/5 ac x 20 trips/yr 1 = \$18,000/5 ac/yr 1 Water every two weeks for 8 months in yr 2, except for 3 months during monsoon season: \$900/day/5 ac x 16 trips/yr 2 = \$14,400/5 ac/yr 2 \$32,400/5 ac x 2 = \$64,800</p>	<p>\$7,700</p> <p>\$2,500</p> <p>\$64,800</p>
<u>TOTAL</u>		\$75,000

3. Stabilization and Revegetation of Disturbed Soils

CATEGORY	DESCRIPTION	COST ESTIMATE
<u>3. Stabilization and Revegetation of Disturbed Soils</u>	<p>Conduct reconnaissance of project to determine where stabilization of disturbed soils is needed. Prepare restoration plan, prepare sites, and hydroseed 10 acres of disturbed soils. Stabilization needs may be more or less than 10 acres.</p> <p>\$3,150/acre to apply local native seed mix. Apply prior to rainy season.</p> <p>\$3,150/ac x 10 acres = \$31,500 Prepare restoration plan = \$2,000 Site preparation = \$10,000</p> <p>Costs may vary depending on how much site preparation is needed, how many sites there are, how far apart sites are from each other, and how far sites are from a source of water. This cost estimate includes no allowance for reapplication if plants do not survive.</p>	<p>\$31,500 \$2,000 \$10,000</p>
<u>TOTAL</u>	The budget FWS originally proposed, \$9,000, is insufficient to complete the work.	\$43,500

Contributing Partners

None at this time, however we anticipate building on previous monitoring and conservation work conducted by the Arizona Game and Fish Department, Borderland Jaguar Detection Project, Northern Jaguar Project, Sky Island Alliance, and Naturalia. One or more of these partners is likely to conduct the work, pending the outcome of contract award.

**Department of the Interior
PF-225 and VF-300 Mitigation Measure
Project Description Worksheet**

General Information

Project Title: Implement Sonoran pronghorn and lesser long-nosed bat conservation measures in Biological Opinion 22410-2008-F-0011, Organ Pipe Cactus National Monument, Arizona.

Project Manager: Sue Rutman, telephone 520-387-6849 ext 7115, sue_rutman@nps.gov

Sponsoring Bureau: Department of the Interior, National Park Service, Organ Pipe Cactus National Monument.

Project Location: Pima County, Arizona

Congressional District: 7

Total Estimated Cost: \$980,000

Description

Project description: The purpose of the work described below is to implement conservation measures, as formally agreed upon between Customs and Border Protection (CBP) and the U.S. Fish and Wildlife Service in the February 11, 2008, Biological Opinion 22410-2008-F-0011(BO) for the pedestrian fence and associated infrastructure along the U.S. border on Organ Pipe Cactus National Monument (OPCNM) near Lukeville, Arizona. The purpose of these agreed-upon conservation measures is to offset adverse effects to the endangered Sonoran pronghorn (*Antilocapra americana sonoriensis*) and lesser long-nosed bats (*Leptonycteris curasoae yerbabuena*) from the pedestrian fence project on OPCNM.

The conservation measures specific to the Sonoran pronghorn and lesser long-nosed bat in the description of the proposed action of the final BO require CBP to provide to OPCNM \$955,000 to restore 84 acres and to monitor invasive species in the project area (Item #1). Additionally, the BO requires CBP to provide \$25,000 to OPCNM to fill a Sonoran pronghorn water source for ten years (Item #2).

Item #1: Restoration of damaged lands and invasive species management

Funding will support a vendor and a term GS-9 botanist to carry out restoration actions as described in the restoration plan. The botanist will as project facilitator and perform tasks such as collecting seed, raising plants in the OPCNM nursery, assisting with field work, including monitoring and removing invasive species in pedestrian fence project area. The contractor will be responsible for hiring qualified workers and carrying out the actions stipulated in annual work plans. Over the course of 3-4 years, 84 acres of disturbed land will be restored and protected from further disturbance. In addition, invasive species will be managed in the pedestrian fence construction zone.

A general restoration plan was finalized and accepted by the DHS in December 2008. The general plan describes restoration priorities and methods in general terms but does not identify specific sites that will be restored in any given year. Each year, an annual work plan

will be developed that will identify specific work sites and restoration techniques. Year-to-year differences in the annual scope of work will result in costs that vary from year to year. Each item in the budget (below) is an estimated cost averaged over three years.

Our plan is to complete task item 1 in 3 years. However, the currently unsafe conditions on the borderlands may prevent us from working in the areas where most restoration work is needed. Delays will also occur if unauthorized vehicle traffic continues to occur on sites selected for restoration.

Environmental compliance will be completed for each annual work plan. Sites identified in annual work plans will be surveyed for cultural resources. Restoration work will be designed so that all cultural resource sites that are eligible for listing on the National Register will be avoided. Avoiding cultural resource sites will permit the use of categorical exclusions under NEPA, thus minimizing project delays due to environmental compliance requirements.

Item #2: Sonoran pronghorn water

Funding will be used to establish and maintain an emergency water source for Sonoran pronghorn of at least 500 gallons, at a cost of \$2,500 per year for 10 years. The project will be done cooperatively with the Arizona Game and Fish Department.

Estimated Start Date: Work items #1 & 2: FY2010

Projected Finish Date: Work item #1: FY2013; Work item #2: FY2010

Corresponding Unique ID Number: AZ002

Project Itemized Budget

	<u>Estimated Amount</u>
Work item #1: Total = \$955,000	
NPS botanist, GS-9 (term), \$70,000/yr for 3 years	\$210,000
Planning & mobilization	\$ 15,000
Seed collecting & propagation	\$ 45,000
Site restoration/revegetation	\$340,000
[including road decompaction, recontouring, erosion control, seeding, planting]	
Invasive species control	\$190,000
Compliance, including cultural resource surveys	\$ 52,000
Monitoring & reporting	\$103,000
Work item #2: Total = \$25,000	
Establish and maintain an emergency water source	
for Sonoran pronghorn of at least 500 gallons, \$2,500/yr	\$ 25,000

Contributing Partners

The NPS will be contributing \$163,000 in overhead costs for work item 1 and \$4,000 in overhead costs for work item 2.

Comments

We have requested but have not received overhead costs (see Contributing Partners)

**Department of the Interior
PF-225 and VF-300 Mitigation Measure
Project Description Worksheet**

General Information

Project Title: San Bernardino Valley Mitigation

Project Manager: Bill Radke, Refuge Manager, 520-364-2104, bill_radke@fws.gov, and Susan Sferra, 602-242-0524 ext 208, susan_sferra@fws.gov,

Sponsoring Bureau: US Fish & Wildlife Service, Arizona Ecological Services Field Office and San Bernardino National Wildlife Refuge

Project Location: Cochise County

Congressional District: District 8, Gabrielle Giffords

Total Estimated Cost: \$657,480

Description

Project description: Mitigation for construction impacts: temporary impact area restoration, wetland mitigation; erosion control on San Bernardino National Wildlife Refuge and other lands east of Douglas. Black Draw, Hay Hollow, and Silver Creek were adversely impacted by construction of temporary roads with inadequate culverts and drainage that caused erosion in the streambed. Most of the 16 miles of road built as part of FV-1b has inadequate drainage and erosion has been documented. See March and June 2009 interagency "as-built" field trip notes.

Effects Analysis:

1. Restore and revegetate 49.7 acres of temporary impact areas to be completed as part of Best Management Practices (\$44,730). Construction debris "mulch" previously deposited on staging areas needs to be removed to allow seeds to germinate. Reapply hydroseed.
2. Restore 1.08 acres of the wetlands (\$54,000) to offset wetland impacts from fence segment FV-1b throughout the San Bernadino Valley.
3. Construct Rio San Bernardino rock and wire erosion control gabions to help slow flood water flow, capture transported sediment, and reduce scouring erosion (\$275,000). These gabions will mitigate impacts to riparian habitat that has occurred as a result of new road construction through a formerly roadless area, inadequate road drainage, and damage to Black Draw and Hay Hollow from temporary road construction and debris deposit. This project will mitigate for adverse effects to listed Yaqui fishes and the Huachuca water umbel.

4. Control erosion and sedimentation currently occurring in segment FV-1b to improve and restore aquatic/riparian habitat for Rio Yaqui fishes by working with private, state, federal, and non-governmental organizations. Install water bars and fix erosion damage that has already occurred. Note that this is a different area than where the gabions are proposed for the Rio San Bernardino (\$258,750.00 plus \$25,000 for NEPA and ESA compliance).

Mitigation Justification

These projects will address impacts that resulted from construction of fence and access roads in the vicinity of San Bernardino National Wildlife Refuge. DHS project impacts to seasonal and perennial stream crossings, historical wetlands, and opening up public accessible roadways through previously roadless areas throughout the San Bernardino Valley would be addressed. Impacts have created opportunities for exotic aquatic species invasion, exotic plant invasion, removed connections among populations of T&E species, degrading metapopulation structure, encouraged severe erosion to wetlands and uplands, and created opportunities for public access into areas that conflict with endangered species recovery and protection and will perpetuate potential "take" issues. Among other conditions, the Rio Yaqui fishes recovery plan (USFWS 1994) recommends the following conditions before downlisting can be considered: secure and protect the San Bernardino aquifer so that all artesian flows maintain themselves year round, and protect critical habitat from detrimental human disturbance including introduction of non-native fishes and water diversions.

Federally listed and sensitive Yaqui fishes have been adversely affected by fence and road construction. These species include the federally listed (beautiful shiner (*Cyprinella formosa*), Yaqui chub (*Gila purpurea*), Yaqui topminnow (*Poeciliopsis occidentalis sonoriensis*), and Yaqui catfish (*Ictalurus pricei*); and sensitive longfin dace (Yaqui form) (*Agosia chrysogaster*), Mexican stoneroller (*Campostoma ornatum*), roundtail chub (Yaqui form) (*Gila robusta*), and Yaqui sucker (*Catostomus bernardini*).

Unpaved roads, disturbed soils, and lack of erosion control lead to soil erosion and sedimentation problems that affect water quality if transported to aquatic/riparian habitats. Increased sedimentation damages aquatic habitats by covering spawning sites, destroying benthic food sources, and reducing water clarity. Fine sediments reduce availability of oxygen to eggs and increase embryo mortality. Fine sediments also cover and clog the gills of fish and other organisms with gills, making breathing difficult. Input of additional sediments can also lead to stream aggradation.

Additional effects analysis provided here:

Erosion and sediment control inadequate on FV-1b. See interagency "as-built" field trip summary from March and June, 2009. These field trips documented lack of water bars and other drainage needs, and the need for erosion repair.

Environmental Stewardship Plan (ESP), p. 2-29: "In general, the drainage of the impact corridor flows to the south into Mexico, draining 421 square miles within the United States (ADWR undated b)...This refuge was established in 1982 to protect water resources and provide habitat

for endangered fish (ADWR undated a)." The border road with inadequate drainage structures inhibits and redirects the natural drainage of this 421 square mile basin

ESP, page 3-16, regarding effects on the Refuge states "...long-term, adverse, indirect impacts may occur due to an increase in pedestrian traffic in the project area, the potential magnitude of which is unknown."

Environmental Stewardship Plan (ESP), page 3-37, states "Based on the acres impacted, a wetlands mitigation and restoration plan will be developed to compensate for unavoidable impacts on wetlands and washes within the project areas." To DOI's knowledge, these plans have not been prepared.

ESP, page 3-31, states "Minor adverse impacts on the hydrology of the Black Draw will be expected to occur as a result of grading and contouring in the impact corridor...Therefore, the effects will be negligible." As documented by refuge personnel, effects were not negligible and should be mitigated.

ESP-page 3-41, "Increased siltation from runoff during storm events and accidental spills could also affect the vegetation. There will also be potential long-term impacts including increased erosion, introduction or spread of non-native plant species, and potential soil compaction to the rooting zones."

ESP, page 3-52, "The fence design does not affect the natural flow of the Yaqui River drainage into Mexico." The border road with inadequate drainage structures inhibits and redirects the natural drainage of this 421 square mile basin and carries loose sediment from the road erosion.

ESP, page 1-5: "Permanent loss of 157.1 acres of vegetation communities, due to construction of tactical infrastructure." Temporary habitat loss of 49.7 acres also occurred during construction of a staging area.

ESP inconsistent in # acres impacted, page 3-41: "A total of 208.8 acres of vegetation is expected to be removed."

In Summary: Project FV-1b resulted in permanent loss of 16 miles x at least 60 ft wide roadbed (>116 acres); but also damage to riparian resources and associated listed fish species (Yaqui topminnow, Yaqui chub, Yaqui catfish, beautiful shiner) and Huachuca water umbel in Black Draw, Hay Hollow, and Silver Creek on San Bernardino NWR. Drainage and erosion into 38 ephemeral wash channels and two vegetated wetlands throughout the San Bernadino Valley not only will result in damage within the 150-foot corridor associated with the fence alignments, but also beyond the 150-foot corridor where erosion continues downslope. Within the 150-foot corridor, the ESP, page 3-37, determined there are 0.36 acres of vegetated wetlands and 11.89 acres of washes.

The vehicle fence traverses three miles of the SBNWR, and a 10,000 square foot staging area was constructed on the refuge. Snail Spring is now cut off from the springsnail population in Mexico by interruption of flow from road and fence.

Estimated Start Date: 2009

Projected Finish Date: 2010

Corresponding Unique ID Numbers

AZ003a

Project Itemized Budget

Task	Cost
1. 49.7 acres temporary impact restoration	\$900/acre x 49.7 acres = \$44,730
2. San Bernardino Wetland restoration (3:1 mitigation ratio)	\$50,000/wetland acre x 1.08 acres = \$54,000
3. Multiple Hay Hollow Wash erosion control gabions, multiple Black Draw erosion control gabions	\$275,000
4. Control erosion/improve fish habitat	258,750. + \$25,000 EA/BA
Total	\$657,480

Contributing Partners

San Bernardino National Wildlife Refuge, BLM

Comments

These projects are included in the mitigation table, because they are high priority time-sensitive projects. If funding is available outside the \$50 million mitigation fund and work can be accomplished in FY 2010, they can be removed from the list.

Literature Cited

U.S. Fish and Wildlife Service. 1995. Fishes of the Rio Yaqui Recovery Plan. USDI, U.S. Fish and Wildlife Service. Albuquerque, New Mexico.

**Department of the Interior
PF-225 and VF-300 Mitigation Measure
Project Description Worksheet**

General Information

Project Title: Rio Yaqui Fish Studies

Project Manager: Bill Radke, Refuge Manager, 520-364-2104, bill_radke@fws.gov, and Susan Sferra, 602-242-0524, ext 208, susan_sferra@fws.gov

Sponsoring Bureau: US Fish & Wildlife Service, Arizona Ecological Services Office and San Bernardino National Wildlife Refuge

Project Location: Cochise County

Congressional District: District 8, Gabrielle Giffords

Total Estimated Cost: \$441,250,

Description

Project description: Mitigation for Effects to Federally Listed Species.

1. Inventory/monitor Rio Yaqui fishes and their habitats to assess population status and impacts (\$86,250). Federally listed and sensitive Yaqui fishes have been adversely affected by fence and road construction. These species include the listed (beautiful shiner (*Cyprinella formosa*), Yaqui chub (*Gila purpurea*), Yaqui topminnow (*Poeciliopsis occidentalis sonoriensis*), and Yaqui catfish (*Ictalurus pricei*); as well as the following sensitive species: longfin dace (Yaqui form) (*Agosia chrysogaster*), Mexican stoneroller (*Campostoma ornatum*), roundtail chub (Yaqui form) (*Gila robusta*), and Yaqui sucker (*Catostomus bernardini*).

The project will be accomplished by working with other federal agencies or private landowners. Unpaved roads, disturbed soils, and lack of erosion control lead to soil erosion and sedimentation problems that affect water quality if transported to aquatic/riparian habitats. Increased sedimentation damages aquatic habitats by covering spawning sites, destroying benthic food sources, and reducing water clarity. Fine sediments reduce availability of oxygen to eggs and increase embryo mortality. Fine sediments also cover and clog the gills of fish and other organisms with gills, making breathing difficult. Input of additional sediments also lead to stream aggradation.

2. Drill a shallow well and install solar low-flow pump to ensure permanent water for perpetuation of Snail Spring wetland to benefit Yaqui chub, Yaqui topminnow, and Yaqui catfish, but particularly the San Bernardino Springsnail, of which this site is critical to its survival (\$25,000). Drill a deep well to relieve pressure on use of the shallow aquifer that

currently feeds Snail Spring (\$80,000). The San Bernardino springsnail has been a candidate for emergency listing since 2008 and a proposed rule in the Federal Register is imminent. The Snail Spring population is the only known location in the U.S. The new border road interrupts sheet flow. If the Mexico springsnail population is determined to be the same species, and if the San Bernardino springsnail disappears from Snail Spring, there is zero probability of recolonization from metapopulations in Mexico, and the species will be extirpated from the U.S. Erosion and sedimentation from the border road may also be adversely affecting the springsnail population downstream in Mexico.

3. Install a fish barrier in Black Draw to impede exotic fish downstream from entering the refuge to help offset sedimentation and adverse affect to the Yaqui fish assemblage (\$250,000). The need for a fish barrier is documented in the ESP on page 4-60 to "impede fish from downstream from entering the refuge."

Effects Analysis:

Presented in the ESP

The Environmental Stewardship Plan (ESP), page 3-31, states "Minor adverse impacts on the hydrology of the Black Draw will be expected to occur as a result of grading and contouring in the impact corridor...Therefore, the effects will be negligible." As documented by refuge personnel, effects were not negligible.

ESP, p. 2-29: "In general, the drainage of the impact corridor flows to the south into Mexico, draining 421 square miles within the United States (ADWR undated b)...This refuge was established in 1982 to protect water resources and provide habitat for endangered fish (ADWR undated a)." The border road with inadequate drainage structures inhibits and redirects the natural drainage of this 421 square mile basin

ESP, page 3-16, regarding effects on the Refuge states "...long-term, adverse, indirect impacts may occur due to an increase in pedestrian traffic in the project area, the potential magnitude of which is unknown."

ESP, page 3-37, states "Based on the acres impacted, a wetlands mitigation and restoration plan will be developed to compensate for unavoidable impacts on wetlands and washes within the project areas." To our DOI's knowledge, these plans have not been prepared.

ESP, page 3-31, states "Minor adverse impacts on the hydrology of the Black Draw will be expected to occur as a result of grading and contouring in the impact corridor...Therefore, the effects will be negligible." As documented by refuge personnel, effects were not negligible and should be mitigated.

ESP-page 3-41, "Increased siltation from runoff during storm events and accidental spills could also affect the vegetation. There will also be potential long-term impacts including increased erosion, introduction or spread of non-native plant species, and potential soil compaction to the rooting zones."

ESP, page 3-52, "The fence design does not affect the natural flow of the Yaqui River drainage into Mexico." The border road with inadequate drainage structures inhibits and redirects the natural drainage of this 421 square mile basin and carries loose sediment from the road erosion.

ESP, page 1-5: "Permanent loss of 157.1 acres of vegetation communities, due to construction of tactical infrastructure." Additionally, temporary loss of 49.7 acres of habitat occurred during construction of a staging area. However, the ESP is inconsistent in number of acres impacted, page 3-41: "A total of 208.8 acres of vegetation is expected to be removed." Whereas $157.1 + 49.7 = 206.8$.

Field Visits

Erosion and sediment control is inadequate on FV-1b. See interagency "as-built" field trip summary from March and June, 2009. These field trips documented lack of water bars and other drainage needs, and the need for erosion repair.

Mitigation Justification

The DHS project adversely affects seasonal and perennial stream crossings and opens up public accessible roadways through previously roadless areas in the San Bernardino Valley. Impacts have created opportunities for exotic aquatic animal and plant species invasion, removed connections among populations of T&E species, thus degrading metapopulation structure, encouraged severe erosion to wetlands and uplands, and created opportunities for public access into areas that conflict with endangered species recovery and protection. Among other conditions, the Rio Yaqui fishes recovery plan (U.S. Fish and Wildlife Service 1994) recommends the following conditions before downlisting can be considered: secure and protect the San Bernardino aquifer so that all artesian flows maintain themselves year round, and protect critical habitat from detrimental human disturbance including introduction of non-native fishes and water diversions.

In conclusion, this mitigation project offsets damage to desert scrub and riparian habitat by minimizing erosion, improving stream crossings and drainage, restoring frog ponds, improving water supply, and preventing exotic species from moving upstream into Black Draw, all of which will benefit listed fish, frogs, and plants.

Estimated Start Date: 2010

Projected Finish Date: 2013

Corresponding Unique ID Numbers

AZ003b

Project Itemized Budget

Task	Cost
1. Inventory Rio Yaqui fish assemblage and impacts	\$86,250
2. Drill wells and install solar pump	Drill shallow well, install solar low flow pump - \$25,000 Drill deep well - <u>\$80,000</u> \$105,000
3. Install fish barrier	\$250,000
Total	\$441,250

Contributing Partners

San Bernardino National Wildlife Refuge, private

Comments

This project mitigates for impacts across San Bernardino Valley, spanning San Bernardino National Wildlife Refuge, BLM, state, and private lands.

Literature Cited

U.S. Fish and Wildlife Service. 1995. Fishes of the Rio Yaqui Recovery Plan. USDI, U.S. Fish and Wildlife Service. Albuquerque, New Mexico.

**Department of the Interior
PF-225 and VF-300 Mitigation Measure
Project Description Worksheet**

General Information

Project Title: Peninsular Bighorn Sheep Study

Project Manager: Guy Wagner, 760-635-1220 ext 371, guy_wagner@fws.gov

Sponsoring Bureau: Department of the Interior – U.S. Fish and Wildlife Service, Carlsbad Ecological Services Office

Project Location: Jacumba Mountains, San Diego and Imperial Counties, California

Congressional District: District 53, Representative Bob Filner

Total Estimated Cost: \$230,000

Description

Project description: The rugged slopes of the Jacumba Mountains are inhabited by the federally endangered Peninsular bighorn sheep (*Ovis canadensis nelsoni*). This narrow, north-south oriented, mountain range crosses the International Border at the San Diego County and Imperial County lines. The Peninsular Ranges, of which the Jacumba Mountains are a part, extend nearly the entire length of the Baja Peninsula and into the U. S. to just north of Palm Springs, California. Desert bighorn sheep populations are found along the steep, east-facing desert slopes on both sides of the border. A portion of the mountain range between U.S. Interstate 8 and the International Border is designated a Wilderness Area on Bureau of Land Management lands. It is a remote area with little public access or use. Approximately 83 animals were estimated to occur in the Jacumba Mountains, with 20 adults inhabiting the area south of I-8 (Weaver 1972). A chronic lack of funding and resources over the years prevented more frequent surveys from being conducted. Consequently, no recent aerial surveys were completed prior to project completion. The population apparently declined for a time, but recently bighorns have definitely re-colonized the I-8 Island, and sightings and evidence of bighorn sheep indicate increasing use of areas south of the Interstate. The International Border is well within the usual ranging distances of bighorn sheep, and peer-reviewed habitat modeling efforts classified the I-8 Island and areas south of the Interstate as important bighorn sheep habitat (Rubin *et al.* 2009). Construction of pedestrian fence (PV-1 style) along the west flanks and vehicle fence (b) (7)(E) style) on the east flanks of the Jacumba Mountains, associated roads, and human activity are expected to modify movement and behavior of bighorn and indirectly impact the primary habitat area adjacent to the fence segments. Peninsular bighorn sheep in the U. S. are separated from other bighorn sheep by human developments on the north and east, and by dense chaparral vegetation on the west. Maintaining a potential connection with populations of Peninsular bighorn sheep living in Mexico represents the only option to prevent a complete and permanent isolation of the endangered segment in California. Additionally, to meet recovery goals, bighorn sheep will need to re-colonize and occupy vacant, but suitable habitat.

Effects Analysis: Bighorn sheep are often reclusive and easily disturbed by humans. Human activities may result in sheep avoiding areas of otherwise suitable habitat. Concentrated human

activity along the border in bighorn sheep habitat may result in severing this species connectivity with populations to the south. It is a tenet of modern conservation biology to preserve habitat connectivity and discourage habitat fragmentation. Populations have a higher probability of surviving long-term when connected to other populations. A group of interconnected subpopulations gains many of the survival benefits characteristic of larger populations. Increased activities in the Jacumba Mountains may impede or prevent bighorn sheep use of the area. Bighorn sheep may be especially sensitive to helicopter use (Bleich *et al.* 1990), and roads and pedestrian traffic may prevent or impede normal movement patterns (Rubin *et al.* 1998, Papouchis *et al.* 2001).

Data on movement patterns and demographics will aid in assessing the effects of fence construction and alignment, and human activity, on bighorn movements and behaviors. To obtain this type of information, GPS-equipped collars would be affixed to bighorn sheep in the study area and programmed to collect data at pre-determined intervals. The data can be retrieved remotely or when the animal is recaptured. In addition to acquiring point locations, the radio-collars allow more accurate population estimates to be obtained during biennial aerial surveys. The radio collars allow biologists to accurately adjust for the number of animals missed during a flight. Bighorn sheep currently occupy the I-8 Island and areas to the north, and they are regularly observed crossing the east-bound lanes of Interstate 8. Bighorn sightings and survey results indicate an expanding bighorn population along the border that is occurring at a time of increased human activity. It will be important to monitor the distribution and abundance of these endangered animals.

Literature Cited

- Bleich, V. C., R. T. Bowyer, A. M. Pauli, R. L. Vernoy, and R. W. Anthes. 1990. Responses of mountain sheep to helicopter surveys. *California Fish and Game* 76(4):197-204.
- Rubin, E. S., W. M. Boyce, M. C. Jorgensen, S. G. Torres, C.L. Hayes, C. S. O'Brien, and D. A. Jessup. 1998. Distribution and abundance of bighorn sheep in the Peninsular Ranges, California. *Wildlife Society Bulletin* 26:539-551.
- Rubin, E. S., C. J. Stermer, W. M. Boyce, S. G. Torres. 2009. Assessment of predictive habitat models for bighorn sheep in California's Peninsular Ranges. *Journal of Wildlife Management* 73:859-869.
- Papouchis, C. M., F. J. Singer, and W. Sloan. 2001. Responses of desert bighorn sheep to increased human recreation. *Journal of Wildlife Management* 65:573-582.
- Weaver, R. A. 1972. Conclusion of the bighorn investigation in California. *Desert Bighorn Council Transactions* 16:56-65.

Estimated Start Date: 2010

Projected Finish Date: 2013

Corresponding Unique ID Numbers

CA001

Project Itemized Budget

Activity/Equipment	Helicopter Hours	Cost per Rotor Hour	Equipment Needs	Equipment Cost	SUB-TOTAL	TOTAL
Sheep Capture	10 Hours per Capture	\$1000 per Hour				\$50,000.00
GPS Radio-Collars			8 Collars	\$3600 per collar	\$28,800	
GPS Collar Drop-Off			8 Drop-Offs	\$300 per collar	\$2,400	
GPS Download Link			1 Download Link	\$400	\$400	
GPS Command Unit			1 Command Unit	\$4,000	\$4,000	
Shipping				\$350	\$350	\$35,950
GPS Radio-Collars			6 Collars	\$3600 per collar	\$21,600	
GPS Collar Drop-Off			6 Drop-Offs	\$300 per collar	\$1,800	
Shipping				\$350	\$350	\$95,000
Aerial Survey	7 Hours per Year	\$1000 per Hour				\$35,000
Aerial Monitoring (fixed-wing aircraft)	24 Hours per Year	\$205 per Hour				\$49,200
Supplies/Cost Increases						\$850

**10 YEAR
TOTAL
\$266,000**

Contributing Partners

California Department of Fish and Game

**Department of the Interior
PF-225 and VF-300 Mitigation Measure
Project Description Worksheet**

General Information

Project Title: Coronado National Memorial (NM) Agave Restoration

Project Manager: Kym Hall, Superintendent, 520-366-5515, ext 2101, kym_hall@nps.gov,

Sponsoring Bureau: Department of Interior, National Park Service, Coronado National Memorial, 4101 E. Montezuma Canyon Road, Hereford, Arizona

Project Location: Cochise County, Arizona

Congressional District: District 8, Gabrielle Giffords

Total Estimated Cost: \$274,873

Description

Project description:

1) Complete agave restoration on a 10 acre staging area (seed collection, nursery grown plants, site preparation and maintenance, watering) as described in Coronado NM Restoration Plan. Fence and road construction removed over 3,700 agaves, which provided forage for lesser long-nosed bats. The E-2A Biological Resource Plan (BRP) states 1,500 agaves will be salvaged and transplanted to an alternate location within the Coronado National Memorial. However, only 528 agaves were transplanted (Danielle Foster, Coronado National Memorial, pers. comm. Aug. 2009). Coronado NM received seeds from 50 agaves to grow out. Plants are being grown in the Coronado NM nursery from the collected seeds using an appropriate soil mix to allow for optimum root growth. Plants will be grown out and planted at a 2:1 ratio; 2 plants grown for every one plant that was not salvageable. The number of plants needed is 6,344, calculated as follows: 3,700 agaves to be salvaged or removed minus 528 agaves salvaged and transplanted = 3,172 agaves removed x 2 = 6,344 agaves to be grown out and planted from seed. When plants have reached at least 6" diameter, they will be planted. It is estimated that it will take up to one year to achieve sufficient size for planting.

To enhance establishment and survival, Lehmann's lovegrass will need to be controlled at the 10-acre planting site with herbicide. Agaves will be planted every 100 sq ft., and will occur in FY2010. Plants must be planted in either fall or winter and no later than March 31. Coronado NM needs the requested funding to plant, monitor, and tend to the planted agaves that will be placed in the 10 acre staging area. This project follows through on the Coronado NM restoration plan, prepared in cooperation with DHS prior to construction.

2) Maintain restoration in the 10 acre staging area for five years to protect young agaves from competition. Plants will be watered during out-planting and then at least every two weeks when sufficient rainfall has not been received (total rainfall per month needs to be at least 1.25 inches). Watering will continue for at least 18 months. Rainfall and watering dates need to be documented. Survival rates need to be at least 75%. Exotic plants need to be controlled at the planting site for at least 18 months to allow the agaves to become established.

Plant survival will be documented at the following intervals: 1 month after planting, 6 months after planting, 12 months after planting, 18 months after planting, and once a year thereafter. If survival falls below 75%, new plants will be grown and planted as needed.

Locations of seed collection and total quantity of seed collected will be recorded. Locations of plantings will be recorded. Natural rainfall and watering logs will be maintained. Survival records of planted material will be maintained.

Effects Analysis:

E-2A (5.75 miles of pedestrian fence west of San Pedro River, 0.18 mile vehicle fence from San Pedro River west to pedestrian fence, and 0.31 mile vehicle fence east of pedestrian fence, Cochise County), and 56 acres of permanent disturbance (Biological Resources Plan-Section E-2A-July 2008). Fence and road construction removed over 3,700 agaves, which provided forage for lesser long-nosed bats.

The E-2A BRP states mitigation funds may be used to support telemetry monitoring of foraging bats to determine degree to which roads, fences, and other operations facilities act as barriers or increase habitat fragmentation to provide useful information for determining the effect on bat foraging and movement of future projects.

Mitigation Justification

The E-2A Biological Resource Plan (BRP) states 1,500 agaves will be salvaged and transplanted to an alternate location within the Coronado National Memorial. However, only 528 agaves were transplanted (Danielle Foster, Coronado National Memorial, pers. comm. Aug. 2009). Coronado NM received seeds from 50 agaves to grow out) see planting description above). The Compensation Measures identified in the BRP state that using funds from the mitigation pool established by CBP, the FWS may offset permanent direct and indirect impacts on habitat used by lesser long-nosed bats and other species, and FWS may use these monies to fund conservation actions benefiting these species.

Estimated Start Date: 2010

Projected Finish Date: 2013

Corresponding Unique ID Numbers

AZ004

Project Itemized Budget

Task	Cost
1) Complete agave restoration on 10 acre staging area (seed collection, nursery grown plants, site preparation and maintenance, watering) as described in Coronado NM Restoration Plan	\$224,873 (estimate from Coronado NM Restoration Plan)
2) maintain restoration in 10 acre staging area to protect young agaves from competition	\$50,000 (\$12,500/year x 4 years)
Total	\$274,873

Comments

Coronado National Memorial has conducted years of bat surveys using a standardized protocol at the State of Texas Mine and will continue to contribute some funding toward this effort. DHS will contribute two years of annual bat monitoring at the State of Texas Mine roost site, one of the conservation measures in the 2008 biological opinion on the Tucson West tower project. Results among years will be compared to determine effects and corrective actions will be taken if impacts are detected.

Literature Cited

Coronado National Memorial. 2008. Agave Restoration Plan for Coronado National Memorial. Submitted to U.S. Army Corps of Engineers. May 23, 2008. Hereford, Arizona

**Department of the Interior
PF-225 and VF-300 Mitigation Measure
Project Description Worksheet**

General Information

Project Title: Northern Aplomado Falcon Reintroduction and Habitat Restoration

Project Manager: Patricia G. Zenone, Ph.D., 505-761-4718,

patricia_zenone@fws.gov**Sponsoring Bureau:** Department of Interior, U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office

Project Location: Hidalgo, Luna, and Dona Ana Counties, New Mexico

Congressional District: 2

Total Estimated Cost: \$499,700

Description

Project description: This mitigation project would benefit the northern aplomado falcon (*Falco femoralis septentrionalis*) and numerous other native grassland species in New Mexico by funding native grassland restoration and northern aplomado falcon reintroductions that will contribute to the recovery of this species and its habitat. This mitigation project is rated as first priority by the New Mexico Ecological Services Field Office because the northern aplomado falcon is New Mexico's most highly endangered species affected by this Department of Homeland Security (DHS) project. Northern aplomado falcons and suitable habitat occur in the vicinity of the project area. The VF-300 projects have impacted approximately 561 acres of suitable northern aplomado falcon foraging and nesting habitat and have affected a larger area through changes in overland water flow patterns and erosion that reduce the quality and quantity of grassland habitat. Furthermore, suitable habitat for northern aplomado falcons and prey species has been fragmented by construction, roads, barriers, fences, and light and noise disturbance, and may be permanently lost. Loss of prey, suitable grassland habitat, and large trees that are used by ravens and raptors for nesting, and upon which northern aplomado falcons depend, would be mitigated by this project through grassland habitat restoration and reintroduction and monitoring of northern aplomado falcons.

According to estimates by the Bureau of Land Management in New Mexico, there are approximately 800,000 acres of degraded grassland habitat in Hidalgo, Luna, and Dona Ana counties. Areas in close proximity to northern aplomado falcon reintroduction sites would be evaluated for potential grassland restoration. Encroaching shrubs would be killed by chemical application from fixed-wing aircraft, helicopter, and/or by hand. Monitoring for the success of restoration would be conducted over a 4-year period, and would include both vegetative and grassland species monitoring.

Reintroduction of northern aplomado falcons would be conducted as part of an ongoing program by The Peregrine Fund, the expert organization that raises and reintroduces northern aplomado falcons into their historic range in the United States. This procedure gradually reintroduces falcons into highly suitable grassland habitat over a period of several weeks while the young

birds are provided with supplemental food by human attendants. This method has been used by The Peregrine Fund to reestablish a self-sustaining population in south Texas, where native aplomado falcons had been extirpated. In addition, monitoring and telemetry of reintroduced northern aplomado falcons would be conducted to ascertain their habitat use, movement patterns, and survival.

Estimated Start Date: FY2010

Projected Finish Date: FY2013

Corresponding Unique ID Numbers

NM001, NM002

Project Itemized Budget

	Cost
Restoration and monitoring of grassland habitat	
Shrub removal, average cost \$40 per acre	\$112,200
Environmental compliance, species surveys, monitoring	\$90,066
Reintroduction of northern aplomado falcons	\$37,500
Monitoring and telemetry of reintroduced northern aplomado falcons	\$150,000
Project management, operations, reporting costs	\$109,934
Total	\$499,700

Contributing Partners

Potential partners include The Peregrine Fund, Bureau of Land Management, Natural Resources Conservation Service, The Nature Conservancy, New Mexico Department of Game and Fish, private landowners, livestock operators, and Fish and Wildlife Service.

Comments

In New Mexico, the northern aplomado falcon is listed as a nonessential experimental population in order to allow greater flexibility in management options. This project would not set precedent for future mitigation projects because of the northern aplomado falcon's nonessential experimental designation and resultant flexibility in management options. The quantity of 2,805 acres of grassland habitat restoration to mitigate for loss of 561 acres would compensate for a predicted percentage of unsuccessful grassland restoration attempted under the extremely harsh conditions of the Chihuahuan Desert, as well as for road- and fence-induced erosion and related grassland habitat degradation to acres outside of the project footprint.

**Department of the Interior
PF-225 and VF-300 Mitigation Measure
Project Description Worksheet**

General Information

Project Title: Border-wide Mexican and lesser long-nosed bat (LLNB) roost protection, roost inventory, roost monitoring, and movement study

Project Managers: Susan Sferra, 602-242-0524, ext 208, susan_sferra@fws.gov; Patricia G. Zenone, Ph.D., 505-761-4718, patricia_zenone@fws.gov.

Sponsoring Bureau: U.S. Fish and Wildlife Service, Arizona Ecological Services Office, Phoenix; U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office, Albuquerque, New Mexico

Project Location: Yuma, Pima, Santa Cruz, and Cochise counties, Arizona; Hildago and Luna counties, New Mexico

Congressional District: District 7, Raul Grijalva
District 8, Gabrielle Giffords
District 2, Harry Teague

Total Estimated Cost: \$925,000

Description

Project description:

1. Find occupied Mexican and LLNB roosts from known caves and mapped mine adits, tunnels, and shafts in Mexican and LLNB habitat near the New Mexico and Arizona border, available from state mining offices. Check caves and mine adits, tunnels, and shafts for Mexican and LLNB. As recommended in Biological Resource Plans (BRPs), continue monitoring occupied bat roosts annually and take corrective management action where needed. Identifying and protecting bat roosts is recommended in the Mexican and LLNB Recovery Plans (U.S. Fish and Wildlife Service 1994; 1995).

Ongoing monitoring at bat roosts is needed to assess impacts over time; protecting these roost sites minimizes impacts associated with the loss of foraging habitat. E-2A, EV-1A, FV-1B, D-5B, and D-6 BRPs support monitoring maternity and summer lesser long-nosed bat roosts to assist in documenting the status of the species. HV-1 through HV-4 BRP states that several important foraging areas containing known roosts are on the Mexico side of the border near the

project corridor, and placement of temporary work lights in extensive areas may compromise cross-border foraging ability.

2. Monitor movement patterns of Mexican and LLNB. This is a recommendation in the Mexican and LLNB Recovery Plans (U.S. Fish and Wildlife Service 1994; 1995). Monitoring is needed to assess impacts, effectiveness of roost protection structures, and movement patterns of bats. Identification of bat movement patterns is a conservation measure in BRPs. BRPs state "Using funds from the mitigation pool established by CBP, USFWS may support telemetry monitoring of foraging bats to determine degree to which roads, fences, and other operations facilities act as barriers or increase habitat fragmentation to provide useful information for determining the effect on bat foraging and movement of future projects." Locations should include the Patagonia, Perilla, Animas, and Peloncillo mountains, because a bat movement study can locate roosts in the many unsurveyed mines and caves in these areas.

Effects Analysis:

D-5B, D-6, E-2A, EV-1A, FV-1B BRPs state the projects are likely to adversely affect the lesser long-nosed bat.

CV-2, D-5, HV-1 through HV-4 BRPs state the projects are not likely to adversely affect Mexican and lesser long-nosed bats, but if columnar cacti and agaves cannot be avoided, funds may be used to conduct restoration in Arizona and New Mexico.

E-2A, EV-1A, FV-1B, D-5B, and D-6 BRPs support monitoring maternity and summer lesser long-nosed bat roosts to assist in documenting the status of the species.

E-2A, EV-1A, FV-1B, D-5B, and D-6 BRPs state funds may be used to support telemetry monitoring of foraging bats to determine degree to which roads, fences, and other operations facilities act as barriers or increase habitat fragmentation to provide useful information for determining the effect on bat foraging and movement of future projects.

For fence segments HV-1, HV-2, HV-3, and HV-4, the FWS does not agree with the BRP Determination of Not Likely to Adversely Affect these species. The BRP states that there are several important foraging areas containing known roosts on the Mexico side of the border near the project corridor. The BRP (Pages 2-7 and 2-13) and the accompanying maps also show that the two bat species are likely to be present at the project area. The BRP additionally states that loss of roosts and foraging habitat are threats to these bats, and that their current population status within the project area is imperfectly known. The BRP states on page 2-9 that activities that adversely affect the density and productivity of forage material for the bats may adversely affect population numbers, and that protection of food resources along migratory pathways may be important to the survival of the species. On page 4-4, the BRP states that approximately 86 agave plants would be removed as a result of TI construction. Given the importance of agaves to the survival of these bats, and given the limited number of forage plants, mitigation for the loss of any foraging habitat is important. Page 1-19 of the BRP states that if areas containing agaves cannot be avoided, then agaves will be replaced at an appropriate ratio to ensure that no bat forage materials are eliminated due to project activities.

Additionally, the proposed radio telemetry project will benefit these species by providing information that will result in improved protection from impacts of associated with TI construction and maintenance. Human-caused disturbances, such as lighting and noise, can easily impact these species' normal behaviors of foraging, roosting, and breeding.

Mitigation Justification

This project mitigates for permanent loss of Mexican and lesser long-nosed bat foraging habitat (columnar cacti, agaves) in the footprint of road and fence segments and staging areas that are not already mitigated through other projects. Loss of these food resources is mitigated by protecting roosts, which offsets forage plant loss.

This project mitigates the cumulative effects of permanent loss of foraging plants (agaves, columnar cacti) within footprint of 100.5 miles of construction/border/access roads and fence in the following projects:

CV-2 = 9 miles of vehicle fence.

D-5B = 5.2 miles of construction/border road.

D-6 = 2.2 miles of construction/border road, 1.34 miles of access road.

E-2A = 6 miles of construction/border road (1.55 miles of the total 6.24 miles of construction road and 1.3 miles of access road were subtracted from the total for this segment because they are mitigated under project AZ04).

EV-1B = 2.8 miles of construction/border road.

FV-1B = 16.3 miles of construction/border road, 7.95 miles of access roads

HV-1 through HV-3 = 16.3 miles of construction roads and vehicle fence, 19.81 miles of access roads

HV-4 = 6 miles of construction roads and vehicle fence

Estimated Start Date: 2010

Projected Finish Date: 2013

Corresponding Unique ID Numbers

NM003 (Combined with AZ008 and NM007)

Project Itemized Budget, Year 1

Task	Cost
1. Find, protect, and monitor Mexican and LLNB roosts in fence segments along border, including the Patagonia, Peloncillo, Perilla, and Animas mountains. The number of LLNB bat roosts disturbed by human use is probably 10 or less. Surveys of mines and caves will be conducted to document roosts adversely affected by human use.	Find roosts near fence segments \$100,000/yr x 1 year = \$100,000
2. Assess movement patterns and roost site use, using telemetry.	\$125,000/yr x 4 years = \$500,000
Total (Indirect costs will be added to this	\$600,000

figure.)

Project Itemized Budget, Year 2

Task	Cost
1. Find, protect, and monitor Mexican and LLNB roosts in fence segments along border, including the Patagonia, Peloncillo, Perilla, and Animas mountains. The number of LLNB bat roosts disturbed by human use is probably 10 or less. Surveys of mines and caves will be conducted to document roosts adversely affected by human use.	Find roosts near fence segments \$100,000/yr x 2 years = \$200,000 Pre- and post- roost protection monitoring \$31,250/yr x 4 years = \$125,000
Total (Indirect costs will be added to this figure.)	\$325,000

Contributing Partners

Coronado National Forest, Coronado National Memorial, Cabeza Prieta National Wildlife Refuge, and Organ Pipe Cactus National Monument monitoring and protection efforts will complement this project. Other partners could potentially include U.S. Geological Survey, Bureau of Land Management, Bat Conservation International, and the Sonoran Desert Museum.

Comments

We will coordinate this project with the bat movement study to be conducted in the Patagonia Mountains, which is one of the conservation measures in the 2008 Tucson West Towers Biological Opinion; and the bat movement and monitoring studies to be conducted on Cabeza Prieta National Wildlife Refuge and Organ Pipe Cactus National Monument in accordance with conservation measures in the Ajo 1 Towers biological opinion. Each of the bat movement and monitoring studies will be conducted in a different geographical area, strengthening the sample size and providing a more comprehensive understanding of bat movements along the southern Arizona and New Mexico borders.

The Animas and Peloncillo Mountains are known to have active Mexican and lesser long-nosed bat roosts. Therefore, because the locations of potential roosts are unknown in relation to the Project corridor, it was assumed in the VF-300 Environmental Stewardship Plan that they could occur within 5 miles of the project footprint.

Literature Cited

U.S. Fish and Wildlife Service. 1994. Mexican Long-nosed Bat Recovery Plan. U.S. Fish and Wildlife Service, Albuquerque, New Mexico.

U.S. Fish and Wildlife Service. 1995. Lesser Long-nosed Bat Recovery Plan. U.S. Fish and Wildlife Service, Albuquerque, New Mexico.

PAYABLE INTERAGENCY AGREEMENT

TERMS AND CONDITIONS

Interagency Agreement Between U.S. Custom and Border Protection and the Department of the Interior Addressing Potential Impacts to Natural and Cultural Resources from PF70, PF225 and VF300

1. General

The Terms and Conditions contained in this document, along with U.S. Customs and Border Protection (CBP) Form 236, "Interagency Agreement," the Statement of Work (SOW), and any identified attachments, constitute a Payable Interagency Agreement between U.S. Customs and Border Protection (hereinafter referred to as "CBP" or the "Requesting Agency") and the Department of the Interior (hereinafter referred to as "DOI" or the "Servicing Agency") (collectively the "Parties"). This Interagency Agreement shall be effective on the date of the final signature by authorized officials of both agencies, and shall remain in effect for the period(s) stated on the form, or until cancelled/terminated in accordance with the Cancellation/Termination provisions of this document.

(a) Authority. The Parties' authority to enter into this Agreement is the Economy Act, 31 U.S.C. § 1535.

(b) Objective and Purpose. The purpose of this Interagency Agreement between CBP (acting as the Requesting Agency), and the DOI, (acting as the Servicing Agency), is to address adverse effects to DOI-administered resources (as defined below under ¶ 1(c). Scope). The effects have occurred in connection with construction and maintenance of border security infrastructure that was or is being constructed as part of CBP's Pedestrian Fence 70 (PF 70), Pedestrian Fence 225 (PF 225) and Vehicle Fence 300 (VF 300) initiatives. In accordance with this Interagency Agreement, DOI, will, on behalf of CBP use its experience, background, and expertise to implement projects, referred to herein as "Conservation Actions," that will address effects on DOI-administered resources within the States of California, Arizona, New Mexico, and Texas along the southern border related to construction and maintenance of PF 70, PF 225 and VF 300.

(c) Scope. The Conservation Actions that are to be funded and implemented pursuant to this Interagency Agreement address effects on DOI-administered

resources. In accordance with applicable statutes, DOI responsibility for these resources applies irrespective of the ownership or jurisdictional status of lands and waters. For purposes of this Interagency Agreement, DOI-administered resources are defined as:

- Endangered and threatened species whose designated habitats, distribution or population will be adversely affected by the deployment and maintenance of border security infrastructure.
- Other fish and wildlife including: migratory birds, resident species, and other members of the animal kingdom whose populations or habitats will be adversely affected by the deployment and maintenance of border security infrastructure.
- Plant communities including wetlands and riparian areas that will be adversely affected by the deployment and maintenance of border security infrastructure.
- Adverse effects to other natural resources such as soils, hydrology, designated wilderness areas from the deployment and maintenance of border security infrastructure.
- Cultural resources, including Native American human remains and cultural items that will be adversely affected by the deployment and maintenance of border security infrastructure.

CBP has determined that there is currently no authority for CBP to provide funding to DOI for direct fee simple land acquisition by DOI. However, both Parties agree that land acquisition is an appropriate means by which to achieve the conservation objectives outlined in this Interagency Agreement. Therefore, if additional statutory authority is enacted which enables CBP to provide funding to DOI for direct fee simple land acquisition by DOI, and DOI identifies Conservation Actions that involve land acquisition by DOI. CBP agrees, after consultation between the Parties, to provide funds to execute such Conservation Actions.

Until such time that CBP possesses authority to provide funding for direct DOI fee simple land acquisition, CBP has determined that there is authority to transfer funds to DOI through this Interagency Agreement to allow DOI to administer and implement assisted acquisitions that will involve the purchase of conservation easements or other interests in land by a third party for mitigation purposes.

The specific terms and conditions that are applicable to the Conservation Actions that will be carried out under this Interagency Agreement are set forth in the attached SOW.

2. Definitions

"Assisted Acquisition"—Interagency acquisitions for which a Requesting Agency, at its discretion, has determined that it is in the best interest of the government to seek the acquisition services of a Servicing Agency in the procurement of supplies or services from the private sector and where the Servicing Agency awards a contract(s) or order(s) on behalf of the Requesting Agency.

"Intra-governmental Payment and Collection (IPAC)"—The U.S. Treasury Department system used by most Federal agencies for interagency payments.

"Interagency Agreement"—A written agreement between Federal agencies or Components of Federal agencies to acquire supplies or services as authorized by statute. The term "Intra-agency Agreement" may be used when referring to such agreements between Components of a Federal Agency.

"Requesting Agency"—A Federal agency that has a requirement and desires to obtain goods or services from a Servicing Agency.

"Servicing Agency"—A Federal agency that is willing and able to provide supplies or services to a Requesting Agency.

3. Responsibilities—

(a) Requesting Agency

(1) Contracting Officer (CO). The Requesting Agency's Federal employee with the authority to enter into, administer, and/or terminate contracts and orders and is responsible for the execution of Interagency Agreements and Economy Act-required Determinations and Findings which include Assisted Acquisitions.

(2) Contracting Officer's Technical Representative (COTR). The Contracting Officer (CO) may designate a Requesting Agency Federal employee to act as his/her representative to perform functions under the Interagency Agreement such as reviewing or inspecting/accepting deliverables, services, and other oversight functions of a technical or programmatic nature covered under the Statement of Work of the agreement. In carrying out these responsibilities, the COTR will operate within the scope of applicable regulations, specifically delegated authorities, and the program authorities and funding limitations of the agreement. The CO cannot authorize the COTR or any other representative to sign documents that require the signature of the CO such as changes to the Interagency Agreement, issuing modifications to the agreement, etc. A COTR is usually designated for Interagency Agreements over \$100,000 and requiring technical or programmatic oversight.

(3) Program Manager. The Requesting Agency's Federal employee assigned responsibility for accomplishing a specific, defined task in support of the Requesting Agency's mission, including an acquisition program or an operational function. The Program Manager may perform functions of a technical or programmatic surveillance nature in lieu of a COTR outlined above. The Program Manager cannot perform functions of a CO.

(b) Responsibilities—Servicing Agency

(1) Mitigation Coordinator (MC). The Servicing Agency's federal employee assigned the responsibility for tracking and reporting project status, including 6 month, annual and tri-annual reports, contract management and other procedural requirements of the Interagency Agreement. The MC will be located in the US Fish and Wildlife Service Region 2, Regional Office and will coordinate and report on all DOI projects funded under this agreement.

(2) Interagency Borderlands Coordinator. The DOI federal employee responsible for monitoring and oversight of DOI activities conducted under this agreement. Acts as liaison among DOI Bureaus and provides direct point of contact for communication with DOI and any modification of the project work with the Requesting Agency.

4. Assisted Acquisitions

If this is an Assisted Acquisition, the Servicing Agency must do the following:

(a) All contracts or orders awarded must comply with the provisions of the Competition in Contracting Act (CICA), Public Law 98-369; and

(b) When awarding any new contract (does not include orders or modifications to contracts/orders) in excess of \$1,000,000 or change in contract scope in excess of \$1,000,000, which results from this Interagency Agreement:

(1) Delay any contract award(s) and any public announcement(s) of such pending award(s) as needed to ensure that the Requesting Agency complies with its requirement to notify the Committees on Appropriations in the House and Senate at least five (5) full business days in advance of such contract award(s) and public announcement(s); and

(2) Enter the Servicing Agency's Funding Agency and Funding Office Identification Codes in the Federal Procurement Data System (FPDS) when reporting any contract (or order) award(s). *[Note: The Funding Agency ID is "7014" (CBP—Customs and Border Protection); the Funding Office Identification Codes are "CS001" (Procurement Directorate, DC) or "CS002" (Procurement Directorate, Indianapolis)]*

Actions under (b)(1) must be coordinated with the Requesting Agency's Contracting Officer. Proof of actions under (b)(2) shall be provided to the Requesting Agency's Contracting Officer.

5. Other Than Assisted Acquisitions

No funds provided through this Interagency Agreement may be used by the Servicing Agency to award a contract or order for the exclusive use and benefit of Requesting Agency.

6. Funding and Reimbursement

(a) The Servicing Agency is limited to recovery of only actual costs incurred. The Servicing Agency shall notify the Requesting Agency's COTR/Program Manager in writing when the costs incurred, together with costs of any outstanding commitments, total 80 percent (%) of the obligated estimated cost ceiling of this Interagency Agreement.

The Servicing Agency shall make no other commitments or expenditures beyond 100% of the funds obligated and shall be excused from further performance of the work unless, and until, the Requesting Agency's Contracting Officer (CO), or other authorized official, increases the total obligation by modification to the Interagency Agreement.

Beginning in September of 2011, and on an annual basis thereafter, CBP and DOI will review the progress and status of each Conservation Action that is currently being funded and implemented under the Agreement. The parties will assess, among other things, current project workloads, work that has been completed, and work that is still required to be completed. Based on this mutual assessment of the Conservation Actions currently being funded and implemented, CBP will adjust the obligated estimated cost ceiling of this Interagency Agreement.

The Requesting Agency shall pay no fee to the Servicing Agency under this Interagency Agreement. This provision was agreed to between the agencies in a Letter of Commitment signed January 15, 2009.

(b) Special Terms for Greater Than One-year Funding

For longer than one-year (e.g., two-year, no-year) funding availability, the dates are extended appropriately.

7. Billing Instructions and Support Documentation for Expenditures

Billing and reimbursement may be handled through the Intra-governmental Payment and Collection (IPAC) system, or the Servicing Agency may submit invoices when the work is completed or as otherwise authorized by the Requesting Agency. The Interagency Agreement number (Payable IGT number), the Agency Locator Codes, appropriate accounting code(s), and associated dollar amounts must be referenced on all IPAC transactions or invoices.

If IPAC is used, the Servicing Agency shall provide documentation supporting all charges to the Requesting Agency's COTR or Program Manager. In the event that advance payment is requested and authorized, the Servicing agency shall furnish expenditure reports to the COTR or Program Manager on a quarterly basis.

If invoices are used, the invoices, along with supporting documentation, shall be submitted to the Requesting Agency's payment office as shown on the Interagency Agreement form, with a copy furnished to the COTR or Program Manager. Per the Economy Act and Federal Acquisition Regulation Subsection 17.505, bills or requests for advance payment will not be subject to audit or certification in advance of payment.

Both agencies agree to promptly discuss and resolve issues and questions regarding payments. The Servicing Agency will promptly initiate year-end and closeout adjustments once final costs are known.

8. Travel

All travel under this Interagency Agreement shall be in accordance with the Federal Travel Regulation.

9. Prompt Payment

The Servicing Agency shall not assess the Requesting Agency any prompt payment interest penalties on account of late payments.

10. Modifications to the Agreement

When appropriate, a unilateral administrative modification will be issued by the Requesting Agency, e.g., to add funds with no change to the Statement of Work, to change a COTR or Program Manager designation, etc. A written bilateral modification (i.e., agreed to and signed by authorized officials of both parties) will be issued to make changes to the work covered under the Statement of Work or renew the agreement for optional periods of performance such as successive fiscal years.

11. Property

Non-expendable property purchased with funds furnished under this agreement shall become assets of the Requesting Agency unless otherwise agreed to in writing by both agencies. Transfer of the property to the Requesting Agency shall be accomplished at the time of closeout of this agreement or during the performance period, as agreed to by both parties. Purchase of equipment required for performance of the work under this agreement must be authorized by the Requesting Agency.

12. Third Party Liability

With respect to third-party liability for acts arising out of the performance of official duty by a government employee of the Servicing agency, the Servicing Agency undertakes responsibilities for the investigation, adjudication, settlement, and payment of any claim asserted against the United States; except that, in all cases, the responsibility for the investigation, adjudication, settlement, and payment of any claim with respect to third-party liability arising out of the use, damage, or destruction of loaned personal property shall be the responsibility of the particular agency that has custody and control of the said personal property. In addition, the Servicing Agency representative shall have the duty of investigating and reporting, in accordance with the Servicing Agency's regulations and policies, incidents occurring on, or involving that Servicing Agency's real property. The Requesting agency agrees to cooperate fully in such investigations.

13. Disputes

Nothing in this agreement is intended to conflict with current Requesting Agency or Department of Homeland Security directives. However, should disagreement arise as to the interpretation of the provisions of this agreement that cannot be resolved between the parties of the Requesting Agency the Servicing Agency, the area(s) of disagreement will be reduced to writing by each agency and presented to the authorized officials at both agencies for resolution. If settlement cannot be reached at this level, the disagreement will be raised to next level in accordance with Requesting Agency's and the Servicing Agency's procedures for final resolution.

14. Cancellation/Termination

This agreement is subject to cancellation or termination, with at least 60 calendar days (unless the Statement of Work specifies a different period) advance written notice by either party. The Servicing Agency shall be reimbursed for the cost of all completed and partially completed work (up to the agreement cost ceiling) as of the effective date of cancellation.

15. Project Completion and Closeout

When the Requesting Agency has accepted all deliverables related to the Statement of Work, the Servicing Agency will provide a written project evaluation and final accounting of project costs to the Requesting Agency. The Servicing Agency account will then be closed and any remaining funds will be returned to the Requesting Agency immediately. After final accounting, the remaining balance in the project account will be deobligated by modification to the Interagency Agreement.

16. Accessibility of Electronic and Information Technology

Each Electronic and Information Technology (EIT) product or service furnished under this agreement shall comply with the Electronic and Information Technology Accessibility Standards (36 CFR 1194), which implements section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794d).

WT to WK

SEP 06 2011

APPROVED

By croberts at 10:50 am, Sep 30, 2010

DEPARTMENT OF HOMELAND SECURITY
U.S. CUSTOMS AND BORDER PROTECTION

INTERAGENCY AGREEMENT

PART I

U.S. Customs and Border Protection	Agreement No.	HSBP1010X00180	Modification No.	
	Option No.		Task Order No.	
Statutory Authority ECONOMY ACT (31 U.S.C 1535)		Requisition No. 0020057641	Date Prepared 08/16/2010	
Name and Address of Customs Organization (Office or Division Responsible for Agreement) DHS - Customs & Border Protection CBP 1901 South Bell Street Arlington VA 22202		Performance Location Office of the Asst Secretary, Law Enforcement & Emergency Ops 1849 C. St. NW WASHINGTON DC 20240		
Participating Agency	Agreement No.	RA10W0648A CR	Modification No.	1
	Option No.		Task Order No.	
Statutory Authority		Requisition No.	Date Prepared 8/17/11	
Name and Address of Participating Organization (Office or Division Responsible for Agreement) Department of the Interior Office of the Secretary Ofc of Law Enforcement & Security 1849 C St. NW, MS-3409 Washington DC 20248-0001		Performance Location DEPARTMENT OF THE INTERIOR OFFICE OF THE SECRETARY OFFICE OF LAW ENFORCEMENT AND SECURITY 1849 C ST. NW, MS-3409, WASHINGTON DC 20248		

PART II

All acquisitions made under this Agreement shall comply with the Competition in Contracting Act, P.L. 98-369, and regulations pertaining thereto.			
Scope of Work: See Aitch SOW DUNS# 879 824 324 70050800	Period of Performance: From 08/25/2010 To 09/30/2015		
	Base Price of Funded IA:	\$5,812,803.00	
	Amount of this Modification:	\$0.00	
	Overhead:	\$0.00	
	Total Price of IA:	\$6,812,803.00	
Attachments:	<input checked="" type="checkbox"/> Terms and Conditions of Agreement	<input checked="" type="checkbox"/> Statement of Work	<input type="checkbox"/> Quantity and Unit Price
	<input type="checkbox"/> Determinations and Findings	<input type="checkbox"/> Option Period Dates	<input type="checkbox"/> Form 238A
	<input type="checkbox"/> Market Research Findings	<input type="checkbox"/> Other	

U.S. Customs and Border Protection Form 238 (05/02)

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